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PRODUCT DATA SHEET – KPR-FAST 12 K/KPS-FAST 12 S

Section 1. PRODUCT DESCRIPTION

FRAME PLUG WITH HEX/COUNTERSUNK HEAD SCREW AND TX DRIVE – KPR-FAST 12 K/KPS-FAST 12 S

Sleeves of frame plugs are made of polyamide with a specially shaped steel screw type K (hex head) or S (countersunk head) for fixing of members on all substrate types. Screws are made of zinc-plated hardened steel. Frame plugs are characterized by very high resistance and problem-free installation in various materials. Plugs with hex head (K) are used for fixing of metal members, and plugs with countersunk head (S) for fixing of wood members. The sleeve is pre-assembled with the screw.

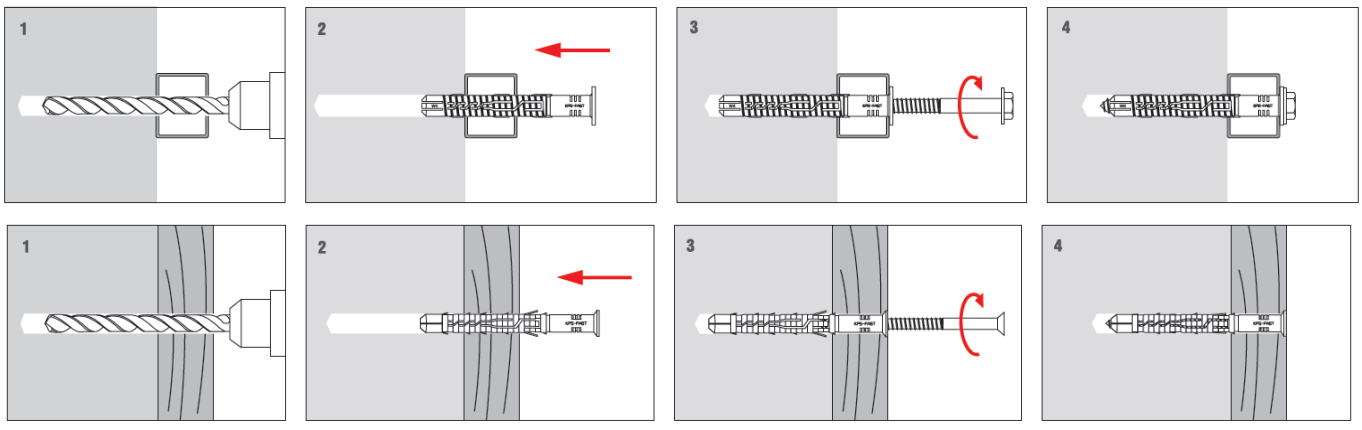
Substrates on which frame plug KPR-FAST 12 K/KPS-FAST 12 S can be installed according to ETAG 020:

- **Category A – concrete**
- **Category B – solid clay brick and sand-lime brick**
- **Category C – hollow clay and sand-lime brick, porous block**
- **Category D – lightweight concrete blocks, autoclaved aerated concrete**

Frame plugs hold European Technical Assessment: ETA-12/0272

Section 2. METHOD OF INSTALLATION

1. Original frame plugs delivered by the manufacturer can be used only
2. Before installation identify a substrate on which the plug will be installed and compare loads which the plug will carry to resistance values given in Product Data Sheet or European Technical Assessment
3. Select an adequate length of the plug so that expansion zone is in the construction material of the wall (thickness of member being fixed matches max. usable length of the plug – t_{fix})
4. Use proper method of drilling according to a substrate type (holes in brickwork substrate made of hollow or autoclaved aerated concrete blocks should be drilled using a drill without impact)
5. Diameter of drilled holes should match diameter of the plugs used
6. Drilled holes in substrates of solid materials should be deeper by min. 10mm compared to the plug anchorage depth
7. Clean the holes in solid materials of drillings with a back and forth motion of the drill at a reduced speed
8. Then insert the plug into a drilled hole, and drive the screw until it completely penetrates the sleeve
9. Forceful tightening of the screw can result in its failure which is not covered by the manufacturer's warranty
10. While the plug is being installed the temperature should be higher than 0°C (this applies to substrate temperature)



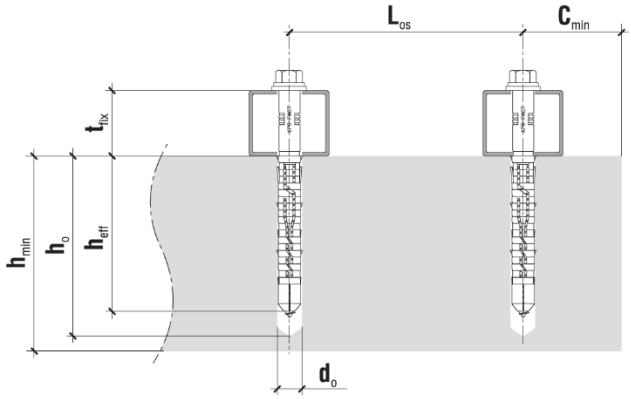
Section 3. TECHNICAL DATA

TECHNICAL PARAMETERS		
Parameter	Unit	Value
Plug diameter	d_k [mm]	12
Drilled hole diameter	d_0 [mm]	12
Effective anchorage depth	h_{eff} [mm]	70
Drilled hole depth	h_0 [mm]	80
Drive type	[-]	(TX-40/SW-13)/(TX-40)*
Use categories	[-]	A B C D
Sleeve material	[-]	PA – polyamide
Screw material	[-]	Zinc-plated steel
European Technical Assessment	[-]	ETA-12/0272

*for KPR-FAST 12 K/KPS-FAST 12 S

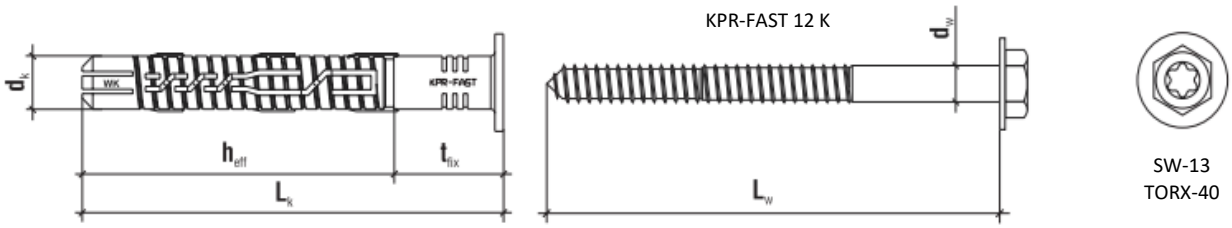
RESISTANCE				
Use categories	Substrate type	Density	Characteristic resistance [kN]	
		[kg/dm³]	KPR-FAST K	KPS-FAST S
A	Concrete C12/15	≥ 2,25	3,5*	
A	Concrete C16/20	≥ 2,30	5,0*	
B	Solid clay brick	≥ 2,00	3,5	
B	Solid sand-lime brick	≥ 2,00	3,5	
C	Hollow sand-lime block	≥ 1,60	3,0	
C	Hollow brick	≥ 1,20	2,0	
D	Lightweight concrete	≥ 0,80	1,5	
D	Autoclaved aerated	≥ 0,35	0,75	
D	Autoclaved aerated	≥ 0,65	3,0	

*cracked concrete



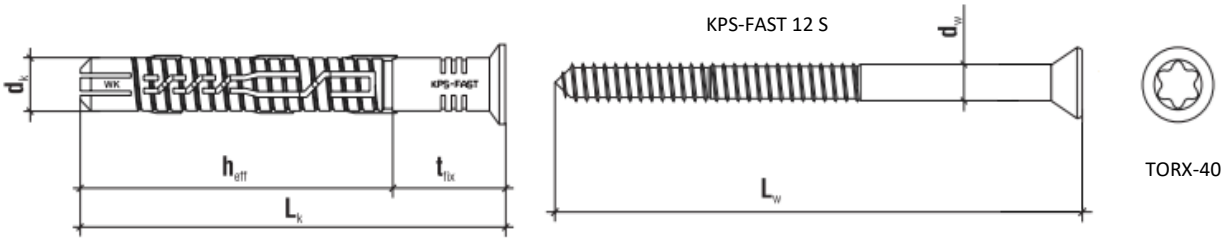
INSTALLATION PARAMETERS			
Substrate type	Min. substrate thickness	Min. distance from edge	Min. axial distance
	h_{min} [mm]	c_{min} [mm]	L_{os} [mm]
Concrete C12/15	100	140	140
Concrete C16/20	100	100	100
Solid clay brick	120	100	200
Solid sand-lime brick	120	100	200
Hollow brick	180	100	200
Autoclaved aerated concrete	100	100	200

KPR-FAST 12 K



SW-13
TORX-40

KPS-FAST 12 S



TORX-40

SELECTION TABLE – KPR-FAST 12 K/KPS-FAST 12 S						
Product code		Sleeve diameter and length	Screw diameter and length	Max. usable length	Drive type	Number of pieces in a box
KPR-FAST 12 K	KPS-FAST 12 S	d_k x L_k [mm]	d_w x L_w [mm]	t_{fix} [mm]	[-]	[pcs]
KPR-FAST-12080K	KPS-FAST-12080S	12x80	8x85	10	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12100K	KPS-FAST-12100S	12x100	8x105	30	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12120K	KPS-FAST-12120S	12x120	8x125	50	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12140K	KPS-FAST-12140S	12x140	8x145	70	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12160K	KPS-FAST-12160S	12x160	8x165	90	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12180K	KPS-FAST-12180S	12x180	8x185	110	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12200K	KPS-FAST-12200S	12x200	8x205	130	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12230K	KPS-FAST-12230S	12x230	8x235	160	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12260K	KPS-FAST-12260S	12x260	8x265	190	(TX-40/SW-13)/(TX-40)	25
KPR-FAST-12300K	KPS-FAST-12300S	12x300	8x305	230	(TX-40/SW-13)/(TX-40)	20
KPR-FAST-12330K	KPS-FAST-12330S	12x330	8x335	260	(TX-40/SW-13)/(TX-40)	20
KPR-FAST-12360K	KPS-FAST-12360S	12x360	8x365	290	(TX-40/SW-13)/(TX-40)	20

SECTION 4. REMARKS

1. All previous versions of this Product Data Sheet shall cease to be valid
2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.